ISSUE SHEET 3

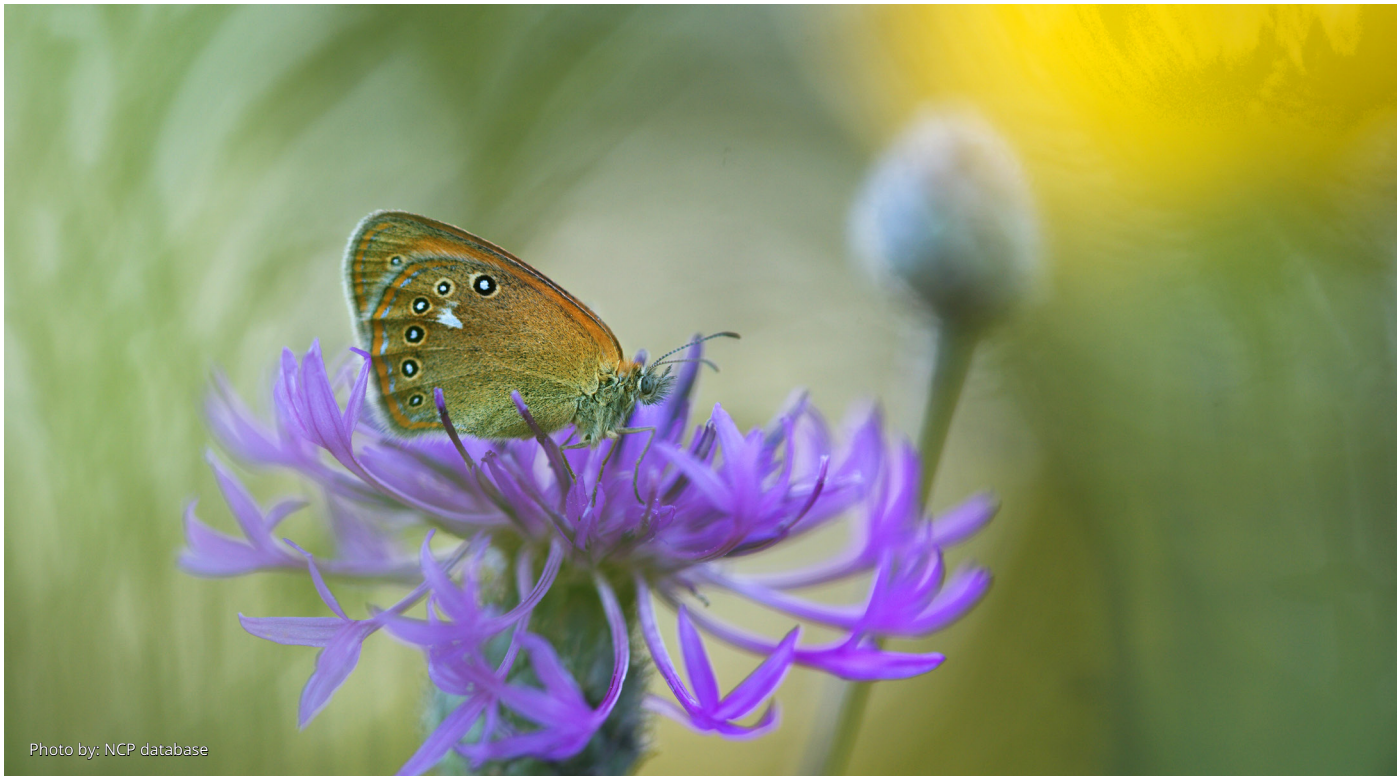
Photo by: NCP database

BIODIVERSITY CONSERVATION IN PRACTICE

The Nature Conservation Programme (NCP) drew extensively on both professional knowledge and public opinion in instigating biodiversity conservation in the Bregalnica watershed. The process of collecting and analysing biodiversity data and then defining priority areas for conservation is outlined in Issue Sheet 2. The NCP supported several actions in this regard: the proclamation of two Protected Areas; the identification and description of future Natura 2000 sites; the restoration of riparian (riverside) ecosystems; and the designation of several rare natural phenomena or "natural rarities".

The key partner in these activities, as in the process of data collection and analysis, was the Macedonian Ecological Society (MES).

> *"The whole process was one of learning as the existing large Protected Areas in the country had simply been decided by the Government/Parliament many years ago. For the Osogovo Mountains, we had to follow the new legislation requiring transparent, multi-stakeholder consultation. This approach was followed for the first time in our country. We recognised that local support and political will was of high importance, not only for the proclamation decision but also for its implementation."*
> Robertina Brajanoska, Executive Director, Macedonian Ecological Society

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NATURE CONSERVATION PROGRAMME

Со трпение до берикет!

KEY LESSONS LEARNED

- Peer to peer learning between professionals from different countries can be very influential when introducing new ideas, especially if those countries have broadly similar conditions. In this case, exchange visits to Bulgaria, Serbia, Slovenia, and Croatia provided interesting and innovative opportunities associated with nature conservation that can be also applied in the country.
- Inviting key stakeholders such as national policy makers, local politicians, heads of local industries and ecologists to visit a site together and discuss conservation aspects proved to be another key tool for advancing a "nature friendly" agenda.
- The identification of Natura 2000 sites in Bregalnica watersheet provide valuable experience of national level.
- In the context of climate change and the increasing frequency of extreme events, riparian ecosystems have growing importance for flood and erosion protection. Accordingly, greater focus is needed for their protection, revitalization, and renewal.
- External donor support is vital for initiating nature conservation efforts but it cannot continue forever. To ensure sustainability government institutions must allocate responsibilities and human and financial resources appropriately.

As mentioned in other Issue Sheets, the goal of the NCP was to increase the area under protection in the Bregalnica watershed from the existing 0.015% to 3%, meaning a total area of some 13,000 ha. By the end of the programme, two Protected Areas had been proclaimed – the larger area of the Osogovo Mountains (48,807 ha) and the smaller Maleshevo (11,461 ha). In addition, three other forms of protection had been identified, described, and as far as possible, put into practice. These were Natura 2000 sites, riparian ecosystems, and rare natural phenomena or "natural rarities". Each is described in turn below.

PROCLAMATION OF PROTECTED AREAS (PA)

According to national legislation, a valorisation study is necessary to commence the proclamation of Protected Area status. This is the key document used by the Ministry of Environment and Physical Planning (MEPP) to process the proclamation. It covers not only biodiversity values and expert opinion, but also socio-economic aspects, the proposed category of protection, borders and zoning, management objectives and a proposal for the management structure. Beyond the compilation of all the necessary data, the process requires careful stakeholder consultation. In the case of the Osogovo Mountains, the mining sector was a particularly vocal stakeholder. Interventions from this sector led to multiple adjustments of the initially proposed boundaries, the negotiations being complicated by management changes during the consultation period which necessitated renewed discussions.

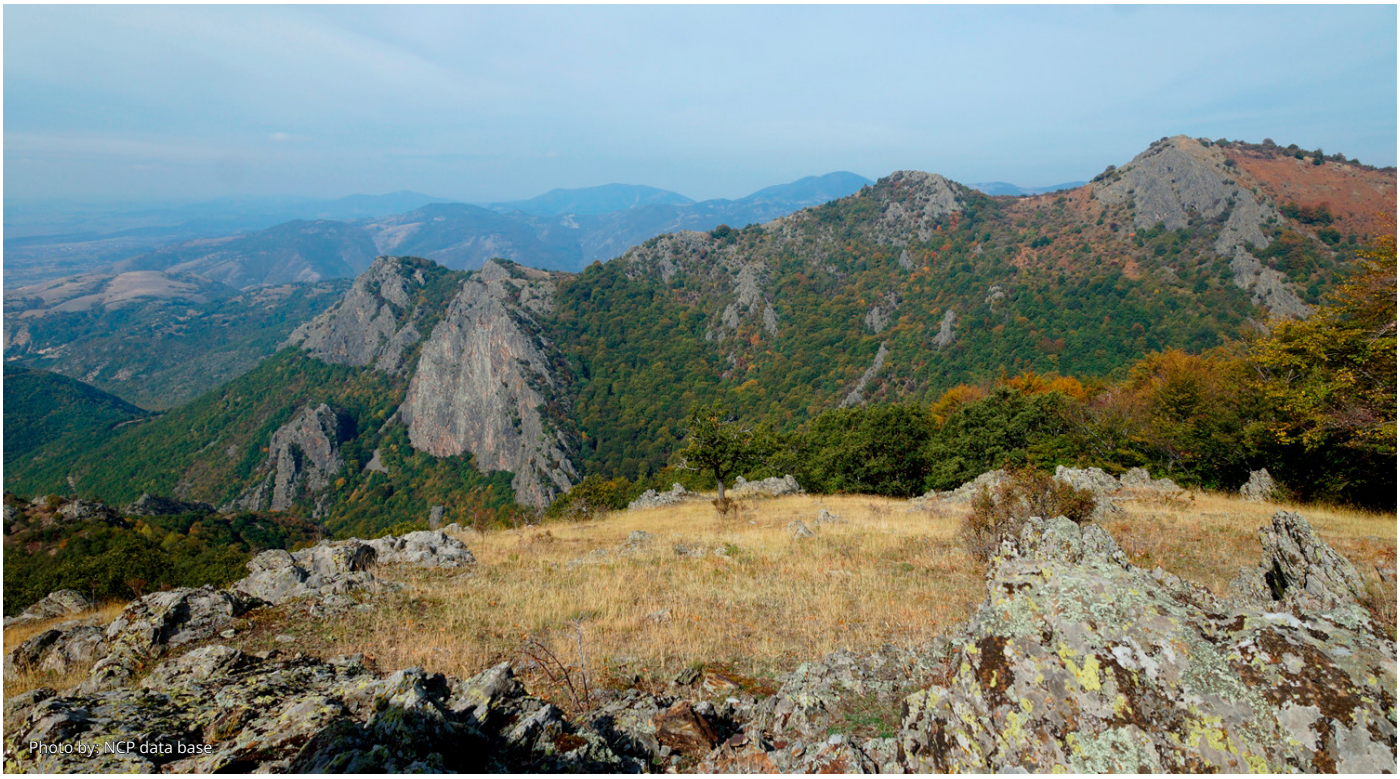


Photo by: NCP data base

"Sustainable mining is core to our values at the SASA Mine; it is the only successful business model for modern mining in which mining activities and environment protection are fully integrated through the application of the best available practices. We believe that the process of planning and designing Protected Areas should include all stakeholders, be done carefully and take into account all aspects of sustainable development, in order to achieve the desired effects in environmental protection, without compromising opportunities for economic growth and development. This is what was achieved in the case of the Osogovo mountains." Chris Colbourne, General Director at SASA Mine, Central Asia Metals PLC.

The same process was employed subsequently for the Maleshevo PA, although in that case the mining sector was not active. Instead, private forest owners, hunters, and non-timber forest product (NTFP) collectors were the key stakeholders. Through communication activities, discussions with relevant institutions, and acting as a neutral party in negotiations, the NCP accompanied the institutional procedure for PA proclamation throughout 2020 and 2021. Finally, the Osogovo Mountains were declared as Protected Landscape (IUCN category V) in November 2020; the Maleshevo PA was subsequently declared in the same category in December 2021.

All PAs must have a management plan, drawn up once the PA has been proclaimed. All management plans follow standard guidelines that are set out under the national law and cover a 10-year period. Some 45 experts were engaged in the Osogovo Mountains management plan, which sets out 360 measures for implementation. About 30 experts were engaged in the management plan for Maleshevo, which identifies 160 measures. NCP supported about 10% of all the planned activities in each PA and for the others possible funding sources were identified as part of the management plan.

Of special importance within the management plans is the establishment of a monitoring system with expert support that will allow the systematic collection of data over time – identifying which species and habits are thriving, which (if any) are declining, and defining interventions accordingly. Responsible persons need to be trained for this – a challenge that remains for the future.

The authority responsible for the management of both Protected Areas is the Public Enterprise National Forest. For the first time in the country this kind of responsibility is dedicated to forest enterprise with opportunity to integrate the biodiversity protection into their conventional practices.

> *"In the past, we saw timber as an important economic resource and we could not see beyond the timber to the whole forest. With support of NCP and exchange with forestry and conservation professionals in other countries, we came to perceive the other values that are present in the forest and learned to recognise and protect them. This is of great importance to me because we now see the forest as the home of many living organisms, with numerous ecological, social, and spiritual values."* Orce Dimitrov – Forestry engineer in PENF responsible for the pprotected landscape "Osogovo Mountains"

NATURA 2000

The Natura 2000 process in EU candidate countries involves identifying and proposing sites as part of a network with the main objective of conserving the species and habitats listed in the EU Habitats Directive and Birds Directive.

Submission of proposed sites for Natura 2000 status requires the completion of a Standard Data Form (SDF). Completion requires accurate data on species distribution at national level in order to justify the importance of the site for the given species and natural habitat(s). However, such national level data is generally either insufficient or unavailable. A second, predictable challenge was the delineation of the boundaries of the proposed Natura 2000 sites in a manner that satisfies socio-economic development and biodiversity protection. A third challenge was the lack of experience amongst the experts in writing Natura 2000 proposals; they were thus uncertain what, exactly, was important to include and what was unnecessary.

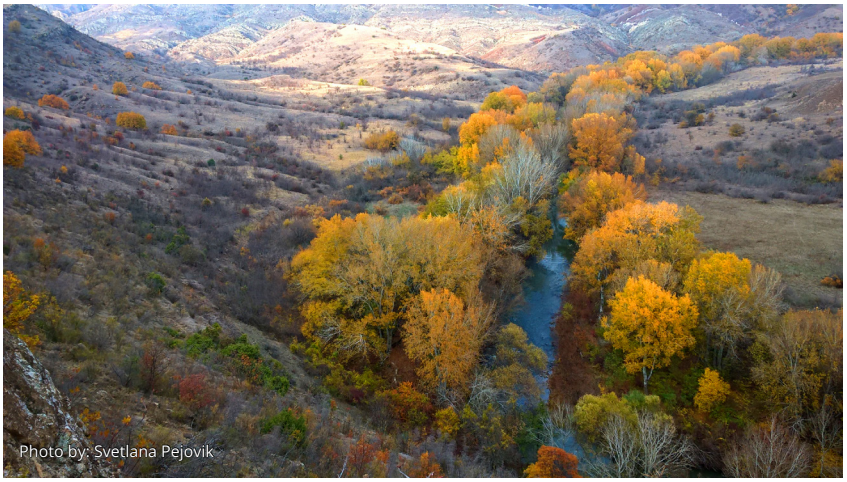
The support of NCP in this process focused on facilitating greater awareness and understanding amongst key stakeholders. A public survey early in activities showed a very low awareness of what Natura 2000 was all about. Accordingly, a public campaign was launched that successfully raised such awareness – primarily in the Bregalnica region but also at national level.

By the end of the NCP, SDFs have been completed for three sites: Ovce Pole (1,901 ha); Dolna Bregalnica (11,129 ha) and Maleshevo (a key area of 6,017 ha within the larger Protected Area). In addition, draft management plans have been prepared for two of these sites.

Halophytic vegetation in Ovce Pole

Habitat type 91DO* Bog woodland Elensko Blato

RIPARIAN ECOSYSTEM RESTORATION: A NATURE-BASED SOLUTION



The riparian (riverside) forests of the lower Bregalnica river were identified through the Ecological Sensitivity Map as being particularly important, vulnerable ecosystems in need of revitalisation. They had been degraded and fragmented through various human activities including sand extraction, tree felling, trampling and compaction by grazing livestock, rubbish dumping and water pollution from agricultural runoff. This type of ecosystem is recognized on European level for rich biodiversity that is easily destroyed. Furthermore, riparian forests play an important role in reducing flooding and soil erosion – something that is particularly important in the context of an increased frequency of extreme events (notably heavy rain storms) due to climate change.

The revitalisation of the riparian forests of the lower Bregalnica river began with a detailed mapping of existing poplar forests, and assessment of their structure, status, and connectivity. Afterwards, reforestation was planned hand-in-hand with activities for public awareness raising and education. The project also ensured good communication with all the relevant stakeholders and organised joint visits to the planned reforestation sites.

The Public Enterprise National Forest (PENF) was a key partner in restoration work, having responsibility to produce the required white poplar (*Populus alba*), white and crack willow (*Salix alba and S. x fragilis*) and alder (*Alnus glutinosa*) seedlings for planting. This was a new task for them, both regarding the propagation of such species in nurseries, and the correct management of young plantations.

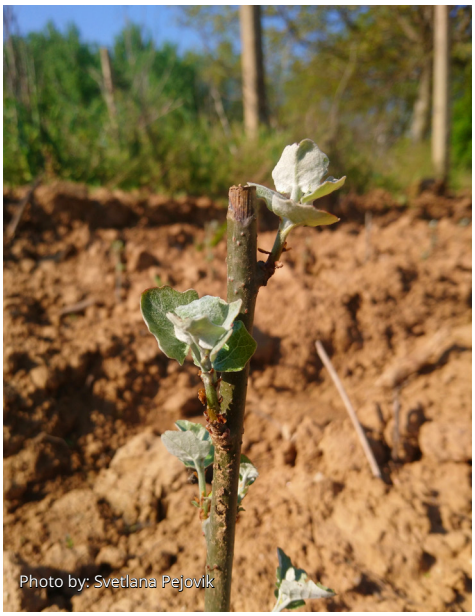


Photo by: Svetlana Pejovik

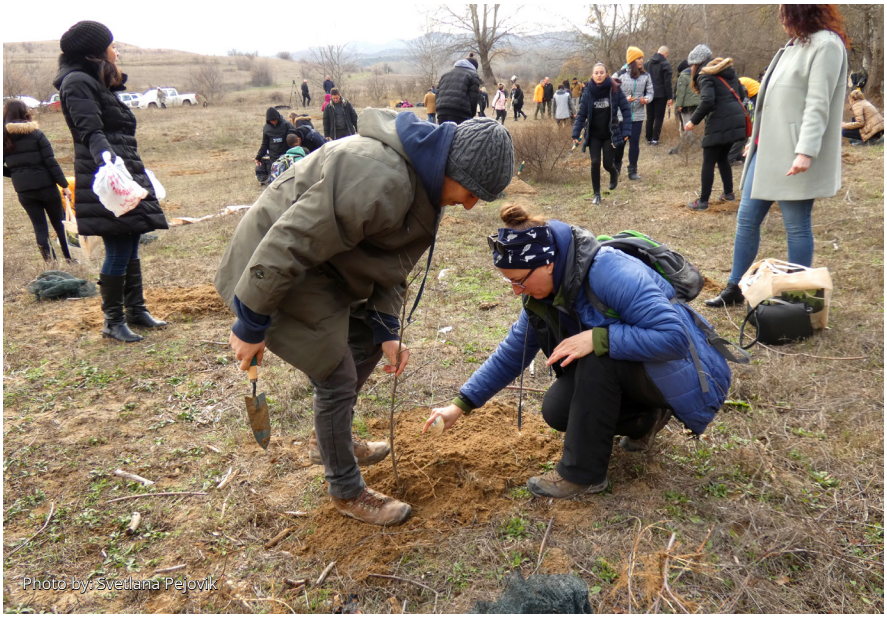


Photo by: Svetlana Pejovik

Around 6300 seedlings were produced under the programme and planted in seven selected areas, covering in total some 10 km of riverside.

As part of the educational activities, 1,000 school children were engaged in the tree planting activities. Through these activities they learned about the importance of riparian forests and visited the Educational Centre at Negrevo (see Issue Sheet 8).

> *"We placed considerable emphasis on public awareness about the importance of riparian forest ecosystems, engaging school children through classroom and outdoor activities. Through them, we also reached their parents. We even produced a special educational guide for children with special needs so that they could be integrated into the programme. The materials produced are available and relevant for the whole of North Macedonia. Many of the teachers have told me that they will continue such teaching even after the closure of NCP."* Svetlana Pejovik, MES

Five invasive tree species were identified as a threat to riparian forests, and control measures attempted such as cutting and curtailing seed spread. The project supported specific monitoring of the distribution, seed production and age status of *Amorpha fruticosa* which has spread rapidly in the area. However, eradication of the species is very challenging.

An essential part of all this work was the establishment of a statistically sound monitoring system of the riparian habitat, recording species belonging to various taxonomic groups (birds, reptiles and amphibians, insects, fungi, molluscs, and mammals) over eight consecutive seasons.

The status of the riparian forests that were revitalised with the support of NCP is promising. Vegetation is thriving, soil health has improved and biodiversity is increasing. The monitoring of the riparian belt should be continued in future in order to provide a true understanding of the restoration process.

DESIGNATED RARE NATURAL PHENOMENA – "NATURAL RARITIES"

Designation of the natural rarities is additional possibility for protection which was used in frame of the NCP. It comprises natural sites of special interest that can, according to Macedonian law, be designated as protected. As sites representing potential tourist attractions, the minicipalities of Bregalnica were actively involved into the proces of proclamation. Six natural rarities were designated into the region as indicated in the text box.

"NATURAL RARITIES" DESIGNATED FOR PROTECTION IN THE BREGALNICA REGION

Delchevo municipality

- Paleoethological site Stamer with fossilised prehistoric fauna
- A rare geological profile exposed at Zvegor
- A cave known as Kiselichka which has an important characteristic cave fauna (especially for bats and insects)

Kochani municipality

- An ancient oak tree in the village of Beli

Zrnovci municipality

- A group of ancient plane trees in Morodvis, now surrounded by protective fencing

Probishtip municipality

- An ancient mulberry tree in the village of Lesnovo


Photo by: NCP database


Photo by: NCP database

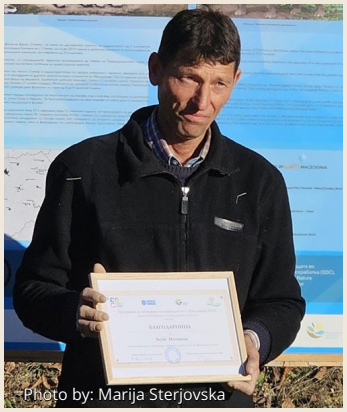


Photo by: Marija Sterjovska

"I live in Stammer, a village that is almost abandoned. In my daily walks around the village, my curiosity was aroused on discoverIng fossils - a treasure that was later scientifically described. It was NCP that recognized and properly valued the site, thus raising its worth in the eyes of local people. The establishment of appropriate tourist infrastructure and the promotion of the site has made our village more attractive, and we are now often visited - not only by local tourists but also people from further away." Ljube Kostov resident and mining engineer, Stammer

Perhaps the most frequently visited of these natural rarities is the fossilised remains at Stammer. The site has become locally well-known and is particularly useful in teaching school children about palaeontology.

CHALLENGES

MANAGING DIVERSE STAKEHOLDER INTERESTS

As has already been stated, care was taken from the beginning to engage all stakeholders –including ones that had very different opinions. This was essential for achieving PA proclamation and avoiding any major objection to conservation activities. Yet, in a context in which different stakeholder group representatives have a long history of interactions, it is not always easy to achieve cooperation and collaboration. For example, different State institutions were not always willing to share datasets under their control and did not always support the proclamation. The existence of a neutral party – Farmahem – often helped to overcome such unwillingness. Also helpful were the combined datasets that had been produced through project activities.

GENERATING PUBLIC ENTHUSIASM FOR NATURE PROTECTION

Public awareness-raising was also prioritised from early in the project. This took two main strands. One was generating knowledge and enthusiasm for nature conservation *per se;* the other was linking this tangibly to improved opportunities for jobs and income generation. The first argument was addressed through small grants for local initiatives (see Issue Sheet 4), publishing the Ecological Sensitivity Map, organising public awareness days, working with schools, and holding workshops, seminars, and study tours for key stakeholders. Work with school children included the establishment of an education centre on nature conservation, described in Issue Sheet 8. The second line of argument was support for regional development linked to sustainable natural resource use – notably eco-tourism, bee-keeping, and "nature friendly" agriculture. These latter activities specifically sought to give hope for economic regeneration in an area suffering depopulation and generally low incomes. Eco-tourism, or Agri-tourism, activities are described in Issue Sheet 5.

"It is so important that local organisations are engaged in conservation activities themselves – activities that will continue after the project. For example, we worked with several bike and mountaineering clubs in the establishment of touristic bike and hiking routes. They are using these trails as part of their business, and they are also emotionally invested in maintaining the natural values of the area. They are the nature conservationists of the future." Despina Kitanova, MES

PRACTICAL RECOMMENDATIONS

- Establish informal ways of communicating with different groups of stakeholders; field visits a particularly good option, giving people an opportunity to discuss issues and agree practical steps.
- Allow an adequate budget for continuous education and public awareness.
- Identify similar countries that are more advanced in nature conservation, and support opportunities for professional exchange with them.
- Work with respected local people who are enthusiastic about conservation and can serve as nature champions or ambassadors.
- Build into budgets adequate funds for the regular, permanent monitoring of species and habitat status – with staff trained accordingly.
- Consider engaging a neutral party for the facilitation of the whole stakeholder consultation process. This can greatly add to efficiency and trust in the process.
- In a country such as North Macedonia, allow at least two to three years for the official process of proclamation following the legislative framework.
- Ensure that newly created management bodies for Protected Areas have adequate financial and human resources to function effectively. This usually requires a period of 3-5 years of external support following establishment.

This Issue Sheet was produced by Robertina Brajanoska, Executive Director of MES, Despina Kitanova Program Coordinator of MES, Svetlana Pejovic, Program Coordinator of MES and Marjana Shushlevska, NCP's Team Leader at Farmahem. Jane Carter, Senior Adviser at Helvetas provided editorial support. It entailed consultation with many NCP stakeholders, including but not limited to those quoted. For further information, please contact farmahem@farmahem.mk

The Nature Conservation Programme, NCP in North Macedonia is a project of the Swiss Agency for Development and Cooperation, SDC. Implemented in phase 1 by Helvetas in partnership with Farmahem and then in phases 2 and 3 by Farmahem with backstopping support from Helvetas, the total project lifespan is effectively 12 years (2012 – 2023).